

FORM PTO-1449  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

16518.087

APPLICATION NO.

09/915,182

APPLICANTS

Katayoon DEHESH

FILING DATE

July 25, 2001

GROUP

1638

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DEC 18 2002  
TECH CENTER 1600/2900

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
RK	AA1	5,585,535	12/1996	Fehr <i>et al.</i>			
	AB1						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
RK	AC1	0 969 014	1/2000	Europe			Yes No
RK	AD1	92/03564	3/1992	PCT			Yes No
RK	AE1	93/10240	5/1993	PCT			Yes No
RK	AF1	94/10189	5/1994	PCT			Yes No
RK	AG1	00/07433	2/2000	PCT			Yes No
RK	AH1	00/75343	12/2000	PCT			Yes No
RK	AI1	01/29238	4/2001	PCT			Abstract Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

RK	AJ	1	International Search Report of PCT/US01/23369 dated September 25, 2002 (4 pages)
RK	AK	1	Dehesh <i>et al.</i> , Database EMBL, Accession No. AX073486 (1/24/2001) (XP002213168)
RK	AL	1	Kaneko <i>et al.</i> , Database EMBL, Accession No. D90905 (10/31/1996) (XP002213167)
RK	AM	1	Kaneko <i>et al.</i> , "Sequence Analysis of the Genome of the Unicellular Cyanobacterium <i>Synechocystis</i> sp. Strain PCC6803. II. Sequence Determination of the Entire Genome and Assignment of Potential Protein-coding Regions", <i>DNA Research</i> , Vol. 3, pp. 109-136 (1996)
RK	AN	1	Leonard <i>et al.</i> , "A <i>Cuphea</i> $\beta$ -ketoacyl-ACP synthase shifts the synthesis of fatty acids towards shorter chains in <i>Arabidopsis</i> seeds expressing <i>Cuphea</i> FatB thioesterases", <i>The Plant Journal</i> , 13(5), pp. 621-628 (1998)
RK	AO	1	Ohlrogge, "Design of New Plant Products: Engineering of Fatty Acid Metabolism", <i>Plant Physiol.</i> , Vol. 104, pp. 821-826 (1994)


EXAMINER

Russell Kallin

DATE CONSIDERED

12/20/2001

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<b>PTO/SB/08A</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)  			<b>Complete if Known</b>		
			Application Number	09/915,182	
			Filing Date	07/25/01	
			Confirmation Number	5251	
			First Named Inventor	Dehesh, K.	
			Group Art Unit	Unknown	
Examiner Name	Unknown				
Sheet	1	of	3	Attorney Docket No.	MTC 6796

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
RK	1	5,378, 619		Rogers, Stephen	01/03/95
RK	2	5,500,361		Kinney, A.	03/19/96
RK	3	5,693,507		Daniell, H., et al.	02/02/97
RK	4	5,723,595		Thompson, G., et al.	03/03/98
RK	5	5,952,544		Browse, J., et al.	09/14/99
RK	6	6,200,788B1		Ferri, S., et al.	03/13/01
RK	7	6,222,099		Gengenbach, B., et al.	04/24/01

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			
RK	8	/	WO 97/10328		Zwick, M., et al.	03/20/97	
RK	9	/	WO 98/46776		Dehesh, K.	10/22/98	
RK	10	/	EP 0120 515		Schilperoort, Robbert A., et al.	03/10/84	

Examiner Signature	<i>Russell Kallin</i>	Date Considered	12/17/02
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			Group Art Unit	Unknown	
			Examiner Name	Unknown	
Sheet	2	of	3	Attorney Docket No.	MTC 6796

OTHER ART - NON PATENT LITERATURE DOCUMENTS				
Examine r Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>	
RK	11 ✓	Knowles, P.F. (1988) Recent advances in oil crops breeding. In World Conference on Biotechnology for the Fats and Oils Industry: Proceedings (Applewhite, T.E., ed.). American Oil Chemists' Society, pp. 35-38.		
RK	12 ✓	Siggaard-Andersen, M., Wissenbach, M., Chuck, J.A., Svendsen, I., Olsen, J.G. and von Wettstein-knowles, P. (1994) The <i>fabJ</i> -encoded beta-ketoacyl-[acyl carrier protein] synthase IV from <i>Escherichia coli</i> is sensitive to cerulenin and specific for short-chain substrates. <i>Proc. Natl. Acad. Sci. USA</i> 91: 11027-11031.		
RK	13 ✓	Dehesh, K., Edwards, P., Fillatti, J., Slabaugh, M. and Byrne, J. (1998) KAS IV: a 3-ketoacyl-ACP synthase from <i>Cuphea sp.</i> is a medium chain specific condensing enzyme. <i>Plant J.</i> 15(3): 383-390.		
RK	14 ✓	Gould, S.J., Subramani, S. and Scheffler, I.E. (1989) Use of the DNA polymerase chain reaction for homology probing: isolation of partial cDNA or genomic clones encoding the iron-sulfur protein of succinate dehydrogenase from several species. <i>Proc. Natl. Acad. Sci. USA</i> 86: 1934-1938.		
RK	15 ✓	Jaworski, J.G., Clough, R.C. and Barnum, S.R. (1989) A cerulenin insensitive short chain 3-ketoacyl-acyl carrier protein synthase in <i>Spinacia oleracea</i> leaves. <i>Plant Physiol.</i> 90: 41-44.		
RK	16 ✓	Clough, R.C., Matthis, A.L., Barnum, S.R. and Jaworski, J.G. (1992) Purification and characterization of 3-ketoacyl -acyl carrier protein synthase III from spinach: a condensing enzyme utilizing acetyl-coenzyme A to initiate fatty acid synthesis. <i>J. Biol. Chem.</i> 267(29): 20992-20998.		
RK	17 ✓	Jaworski, J.G., Post-Beittenmiller, D. and Ohlrogge, J.B. (1993) Acetyl-acyl carrier protein is not a major intermediate in fatty acid biosynthesis in spinach. <i>Eur. J. Biochem.</i> 213(3): 981-987.		
RK	18 ✓	Shimakata, T. and Stumpf, P.K. (1982) Fatty acid synthetase of <i>Spinacia oleracea</i> leaves. <i>Plant Physiol.</i> 69: 1257-1262.		
RK	19 ✓	Shimakata, T. and Stumpf, P.K. (1982) Isolation and function of spinach leaf beta-ketoacyl-[acyl carrier protein] synthases. <i>Proc. Natl. Acad. Sci. USA</i> 79:5808-5812.		

Examiner Signature	<i>Russell Kallen</i>	Date Considered	12/17/02
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Sheet <b>1</b> of <b>3</b>	Attorney Docket No.	MTC 6796	



RK	20 ✓	Kauppinen, S., Siggaard-Andersen, M. and von Wettstein-Knowles, P. (1988) Beta-ketoacyl-ACP synthase I of <i>Escherichia coli</i> : nucleotide sequence of the <i>fabB</i> gene and identification of the cerulenin binding residue. <i>Carlsberg Res. Commun.</i> 53: 357-370.	
RK	21	Coulson, A. (1994) High-performance searching of biosequence databases. <i>Trends in Biotech.</i> 12: 76-80.	
RK	22*	Baxeavanis, A.D., Boguski, M.S. and Ouellette B.F.F. (1997) Computational analysis of DNA and protein sequences. In <i>Genome Analysis: a laboratory manual, Volume 1: Analyzing DNA</i> (Birren, B., Green, E.D., Klapholz, S., Myers, R.M. and Roshams, J., eds.) 1: 543-559.	
RK	23	Magnuson, K., Carey, M.R. and Cronan, J.E., Jr. (1995) The putative <i>fabJ</i> gene of <i>Escherichia coli</i> fatty acid synthesis is the <i>fabF</i> gene. <i>J. Bacteriol.</i> 177(12): 3593-3595.	
RK	24 ✓	Edwards, P., Nelsen, J.S., Metz, J.G. and Dehesh, K. (1997) Cloning of the <i>fabF</i> gene in an expression vector and <i>in vitro</i> characterization of recombinant <i>fabF</i> and <i>fabB</i> encoded enzymes from <i>Escherichia coli</i> . <i>FEBS Letters</i> 402: 62-66.	
RK	25	Garwin, J.L., Klages, A.L. and Cronan, J.E., Jr. (1980) Beta-ketoacyl-acyl carrier protein synthase II of <i>Escherichia coli</i> : evidence for function in the thermal regulation of fatty acid synthesis. <i>J. Biol. Chem.</i> 255(8): 3263-3265.	
RK	26 ✓	Moche, M., Dehesh, K., Edwards, P. and Lindqvist, Y. (2001) The crystal structure of beta-ketoacyl-acyl carrier protein synthase II from <i>Synechocystis sp.</i> at 1.54 Å resolution and its relationship to other condensing enzymes. <i>J. Mol. Biol.</i> 305: 491-503.	
RK	27 ✓	Chen, Z.-L., Schuler, M.A. and Beachy, R.N. (1986) Functional analysis of regulatory elements in a plant embryo-specific gene. <i>Proc. Natl. Acad. Sci. USA</i> 83: 8560-8564.	
RK	28 ✓	Thompson, G.A., Scherer, D.E., Foxall-Van Aken, S., Kenny, J.W., Young, H.L., Shintani, D.K., Kridl, J.C. and Knauf, V.C. (1991) Primary structures of the precursor and mature forms of stearoyl-acyl carrier protein desaturase from safflower embryos and requirement of ferredoxin for enzyme activity. <i>Proc. Natl. Acad. Sci. USA</i> 88: 2578-2582.	
RK	29 ✓	Wu, J., Lightner, J., Warwick, N. and Browse, J. (1997) Low-temperature damage and subsequent recovery of <i>fabI</i> mutant <i>Arabidopsis</i> exposed to 2°C. <i>Plant Physiol.</i> 113(2): 347-356.	

Examiner Signature	<i>Russell Kelly</i>	Date Considered	12/17/02
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